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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,652	11/15/2001	Yasutaka Nagaoka	Q67305	7453

7590 05/22/2003  
SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC  
2100 Pennsylvania Avenue, N.W.  
Washington, DC 20037

EXAMINER

MCCALL, ERIC SCOTT

ART UNIT	PAPER NUMBER
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2855

DATE MAILED: 05/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/987,652

Applicant(s)

NAGAOKA ET AL.

Examiner

Eric S. McCall

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-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 March 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 March 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**STRUCTURE FOR MOUNTING STEERING**  
**ANGLE SENSOR FOR STEERING**

**FINAL OFFICE ACTION**

In response to the Applicant's amendment (paper no. 6) dated March 24, 2003.

**DRAWINGS**

The corrected formal drawings of figures 10 and 11 filed on March 24, 2003 has been approved and entered into the application.

**CLAIMS**

**35 U.S.C. § 112**

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-7 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

In the Applicant's amendment, the Applicant has amended independent claim 1 to state that the steering-signal transmitting unit, the turn signal lever, the wiper control switch lever, and the fitted recessed portion are all attached to or provided in the "upper portion of the column". However, nothing in the Applicant's originally filed disclosure clearly states such a feature, for the Applicant's originally filed disclosure is completely silent as to "an upper portion of a steering column" and thus said additions are deemed as new matter.

Furthermore, the added limitation to independent claim 1 of "the fitted recessed portion is substantially adjacent to the turn signal lever and wiper control switch lever" is not clearly described in the Applicant's originally filed disclosure and thus deemed as new matter.

Also, the Applicant has amended independent claim 4 to state that the turn signal lever and the fitted recessed portion are both attached to or provided in the “upper portion of said column”. However, nothing in the Applicant’s originally filed disclosure clearly states such a feature, for the Applicant’s originally filed disclosure is completely silent as to “an upper portion (or lower portion) of a steering column” and thus said additions are deemed as new matter.

35 U.S.C. § 102

In view of the Applicant’s amendments, the rejection of claims 1, 4, and 7 under 35 U.S.C. 102(b) as being anticipated by the Applicant’s own admitted prior art has been overcome.

However, the following still applies:

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoshino et al. (4,683,375).

With respect to claim 1, Hoshino et al. teach a structure for mounting a steering angle sensor of a steering wheel (fig. 3), wherein

a column (20) including a through-hole (area for shaft, 12, to pass through) extending along a longitudinal axis of said column (fig. 3), said column including top and bottom surfaces through which said longitudinal axis passes, and at least one side surface (fig. 1),

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wherein a steering-signal transmitting unit (the wire/connector coming from sensor, 16, as shown in fig. 2), an inherent turn signal lever, and an inherent wiper control switch lever are attached to an upper portion of the column (for as surely the Applicant can appreciate, the mounting of a turn signal level and a wiper control switch lever on the upper portion of the steering column is very well known and very common in the art), and

wherein a fitting recessed portion (area which accepts sensor 16) is provided in the side surface of the upper portion of the column (the area which accepts sensor 16 is interpreted as the upper portion of the column because the column extends well below said sensor 16 and thus said acceptance area is deemed as being in the “upper portion” as claimed, and furthermore because the Applicant has never defined the meaning of the “upper portion of the column”) and a steering angle sensor (16) is inserted and fitted into the fitting recessed portion from the direction of the side surface of the column (fig. 3),

wherein the fitting recessed portion is substantially adjacent to the turn signal lever and wiper control switch lever (the fitting recessed portion is interpreted as being in the upper portion of the steering column, as are the turn signal lever and wiper control switch, and thus the fitting recessed portion, the turn signal lever, and the wiper control switch are interpreted as being “substantially adjacent” to one another and furthermore because the Applicant has never defined the meaning of “substantially adjacent”).

With respect to dependent claims 2 and 3, the Applicant has not address said claims, and thus attention is directed to the previous office action for the specific rejection thereof.

With respect to claim 4, the prior art teaches a steering angle sensor mounting structure, comprising:

- a steering angle sensor (16) for detecting a steering angle of a steering wheel;

- a column (20) to which a steering-signal transmitting unit (12/14; ie. the steering mechanism itself) is attached, the column including top and bottom surfaces and at least one side surface, the steering-signal transmitting unit including a rotating member (14) rotating about an axis;

- a fitting recessed portion (area which receives the sensor 16) provided in a side surface of the column (20) through which the axis does not pass (fig. 3);

- an inherent turn signal lever attached to an upper portion of said column,

- wherein the steering angle sensor (16) is inserted and fitted into the fitting recessed portion from the direction of the side surface (fig. 3), so that the steering angle sensor detects the steering angle through the rotating member (14), and

- wherein the fitting recessed portion is located in said upper portion of said column along with the turn signal lever (the area which accepts the fitting recessed portion and the inherent turn signal lever is interpreted as the upper portion of the column because the column extends well below the recessed portion and thus said acceptance area is deemed as being in the "upper portion" as claimed, and furthermore because the Applicant has never defined the meaning of the "upper portion of the column").

With respect to dependent claims 5-7, the Applicant has not address said claims, and thus attention is directed to the previous office action for the specific rejection thereof.

*Response to Arguments*

The Applicant's arguments have been considered but have not been found to be persuasive. Specifically, the Applicant argues that the prior art teaches the fitting recessed portion in the bottom portion of the steering column distant from the turn signal lever and wiper control switch wherein the Applicant argues that their claims call for a fitting recessed portion which is substantially adjacent the turn signal lever and wiper control switch (ie. at the top of the column).

In response, the Examiner points out that the Applicant has never disclosed in their originally filed disclosure a "lower portion" or an "upper portion" of the steering column. Thus, said terms are deemed relative and as a result the prior art is interpreted as teaching the fitting recessed portion in the upper portion of the steering column because (1) the column extends well below the fitting recessed portion and thus said portion is deemed as being in the "upper portion" as claimed, (2) the Applicant has never originally disclosed that the fitting recessed portion is in the upper portion as now claimed, and (3) because the Applicant has never defined the meaning of the "upper portion of the column" (see above rejection under 35 USC 112, first paragraph).



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Furthermore, the fitting recessed portion, the turn signal lever, and the wiper control switch are interpreted as being near one another because (1) the fitting recessed portion is in the upper portion of the steering column, as are the turn signal lever and wiper control switch, and (2) because the Applicant has never originally disclosed the proximity of the different elements (see above rejection under 35 USC 112, first paragraph).

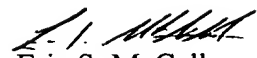
### **CONCLUSION**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication should be directed to Eric S. McCall at telephone number (703) 308-6968.

  
Eric S. McCall  
Primary Examiner  
Art Unit 2855  
May 19, 2003